

AQUATIC INVASIVE SPECIES PROGRAM UTAH DIVISION OF WILDLIFE RESOURCES

NORTHEASTERN REGION SUMMARY

(January 1 thru December 31, 2012)

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General

The new Utah Division of State Parks and Recreation (SP&R) contract for aquatic invasive species (AIS) management has proven to be a success. Implementation shows that the number of boats interdicted (inspections, boater AIS education and decontaminations when needed) has increased. Also, compliance with the required Decontamination Certification Form has increased, too. SP&R has a distinct visibility advantage at the state parks, since personnel are present during all hours of operation, making AIS contacts. The public is acutely aware of the State of Utah's AIS program, and they expect to be contacted by Department of Natural Resources employees, regardless of whether or not the representative is with Utah Division of Wildlife Resources (UDWR) or SP&R.

Region-wide Operations

One Biologist I position was funded for 12 months by UDWR (\$75,222) to manage the regional AIS Program and to supervise two Wildlife Technician II positions along with some of the Wildlife Technician I positions. Additionally, the Biologist coordinated multiple state parks in their implementation of the Utah Aquatic Invasive Species Management Plan (Plan).

Note: The Biologist I went on family leave beginning in late September thru December, so a Technician II was selected to serve in the Biologist's role from October thru November (budget cost \$7,600). After which, the region's Aquatic Manager and Assistant Aquatic Manager covered the Biologist's duties during December. In the interim the Biologist I was promoted, so a new Biologist I will be selected in early January 2013.

Two Wildlife Technician II positions were funded by UDWR; one for 6 months funded (\$24,382) and the other funded for 5 months (\$20,339). Both were assigned to rove between regional waters as needed and to supervise a segment of the Wildlife Technician I positions assigned to specific water bodies.

Multiple Wildlife Technician I positions and Lead Ranger Aides performed AIS duties at individual water bodies or state parks during the highest boating periods.

In summary the following was accomplished by AIS staff in the region performing for UDWR, SP&R or their partners:

- 15,748 boats were interdicted and inspected.
 - 26,944 folks (actual count) while boating--includes the boaters and those who accompanied them, which was an increase of 10,627 (65%) contacts from 2011--were educated about:
 - (1) Risks from quagga and zebra mussels; and
 - (1) How to self-decontaminate the boat.
- Note:** The actual count for numbers of people educated showed an average of 1.71 folks per boat to participate, regardless of whether the boat was being used for fishing and/or other recreational purposes.
- 164 boats were professionally decontaminated, including Red Fleet Reservoir. This total is down 1,114 decontaminations from 2011.
 - The decrease occurred since most boaters leaving Red Fleet, with intent to return, were allowed to clean and drain on site, but not required to get professionally decontaminated on site as per the Red Fleet Reservoir Control Plan.
 - One boat, discovered by Wyoming Game and Fish Department on the Wyoming side of Flaming Gorge Reservoir was encrusted with dead quagga mussels; it came from Lake Havasu.
 - Law Enforcement personnel from UDWR, SP&R or their partners made thousands of contacts to enforce Rule R657-60. These contacts are not included in the region or statewide totals, but stand alone. Most of the contacts were outreach oriented, although many involved issuance of a non-compliance notice, and a few written “warning” or “notice to appear in court” citations were issued. Compliance rates are considered to be good and improving.
 - An Administrative Checkpoint (5 hours of operation) was conducted on Memorial Day along US Highway 191 nearby to Antelope Flats, on the Utah side of Flaming Gorge Reservoir. Operations intercepted 15 boats; none needed to be decontaminated, and none were encrusted with Dreissena mussels. No AIS violations were discovered, however 20 other wildlife code or traffic code violations were handled.
 - An Administrative Checkpoint (5 hours of operation) was conducted on July 24th weekend (Utah’s Pioneer Day holiday) along Utah Highway 43 nearby to Manila, on the Utah side of Flaming Gorge Reservoir. Operations intercepted 44 boats; none needed to be decontaminated, and none were encrusted with Dreissena mussels. No AIS violations were discovered, however 9 other wildlife code or traffic code violations were handled.
 - 1,175 boater surveys were collected, determining their last water visited and the number of folks accompanying the boat.
 - The AIS Biologist received no inquiries from boaters about the written non-compliant warnings they received from State Parks and Recreation Rangers,

Conservation Officers or Wildlife Technicians. In the past inquiries have been common. The reduced number of inquiries shows that folks have grasped the knowledge to understand the law as it relates to the Decontamination Certification Form.

- AIS Biologist received 13 calls from boaters who had purchased a new/used boat or had been in AIS infested waters or wanted more information regarding AIS. One of these calls resulted in a professional decontamination.
- Watercraft Inspection and Decontamination Training (WIT) as either level I or level II occurred for all 16 DWR Technician I positions during a 2 day training session. WIT I training also occurred for approximately 20 SP&R Seasonal Employees at Starvation, Steinaker and Red Fleet State Parks. Additionally, 7 refresher training sessions occurred throughout the 2012 season.
- AIS Biologist conducted hatchery AIS presence/absence training for USFWS's Region 6 hatchery staff and Colorado Wildlife and Parks' hatchery inspectors.
- AIS Biologist conducted AIS presence/absence inspections at State Fish Hatcheries and at origination and destination sites for wild fish transfers to minimize inadvertent spread of AIS through routine wildlife management practices.

Northeastern Region Water-By-Water Reports (listed in alphabetical order)

Big Sandwash Reservoir, Flaming Gorge Reservoir, Green River (below dam), Matt Warner Reservoir, Pelican Lake, Red Fleet/Steinaker reservoir complex (Red Fleet and Steinaker reservoirs) and Starvation Reservoir

Big Sandwash Reservoir (random checks)

- 19 boats were interdicted and inspected from Memorial Day thru Labor Day.
 - 32 contacts were educated.
- No boats were decontaminated.

Flaming Gorge Reservoir--Utah side

- Flaming Gorge budget was \$58,960 and AIS personnel performed for 15.5 months or 1.29 FTE.
 - UDWR implemented the Plan as follows:
 - 1 UDWR funded Technician II \$20,339 (this cost was previously reported); 5 months (mid April thru mid September);
 - 2 UDWR funded Technician I positions \$25,664—7 months (3.5 months each—mid May thru Labor Day);
 - 1 US Forest Service funded Technician I position \$12,957; 3.5 months—mid May thru Labor Day.
- Three \$13,499 decontamination units are assigned to Flaming Gorge Reservoir's Utah side (1 @ Dutch John; 1 @ Lucerne Marina; 1 as back-up @ Vernal due to the large number of decontaminations done in town). Two were purchased by UDWR with General Fund in earlier fiscal years. The third was purchased by the U.S. Forest Service and assigned for use by UDWR at Flaming Gorge Reservoir.

- 7,886 boats were interdicted, inspected as needed, and educated about AIS on the Utah side of Flaming Gorge Reservoir.
 - 13,680 AIS contacts were educated.
 - 406 boater surveys were collected.
- 29 high risk inspections were performed, since the boats were used within the previous 30 days on a Dreissena mussel affected water body; and
- Two boats were professionally decontaminated due to their operator's stated use within the prior 30 days on a quagga, zebra or false dark mussel affected water body as follows: 1 boat from Lake Havasu and 1 boat from Pueblo Reservoir.
 - No boats were encrusted with quagga or zebra mussels.
- Boater History of Last Water Visited (N = 406 boater interviews)
 - Top 8 Last Waters Visited
 - Flaming Gorge (n= 191 or 47%)
 - Lake Powell (n= 19)
 - Willard Bay (n= 17)
 - Pineview (n= 15)
 - Utah Lake (n= 13)
 - Strawberry (n= 10)
 - Steinaker (n= 9)
 - Colorado waters (n= 51)
 - Visitors from Colorado waters include: Blue Mesa (inconclusive Dreissena detection), Horsetooth, Steamboat Lake, Elkhead, Rifle Gap, Pueblo Reservoir (Dreissena infested), Granby Lake (Dreissena detected) and Carter Lake.
- 1 media release was directly related to Flaming Gorge Reservoir in 2012. The Vernal Express reported on Burbot netting conducted by UDWR and WYGF.
- Boot wash stations were utilized for large scale aquatic inventory projects on Sheep Creek and at Spirit Lake, tributary waters to Flaming Gorge Reservoir.
- 1st Annual Flaming Gorge Fishing Derby by Lucerne Valley Marina was held on Flaming Gorge. Teams were checked in both days before the tournament started. UDWR had an information desk on site. 200 teams with 3 people per team were contacted, educated and had their boat inspected by AIS technicians. No boats required professional decontamination.
- B.A.S.S. Federation National Western Divisional tournaments were held on Flaming Gorge and administered through Wyoming. UDWR technicians inspected 26 boats on the Utah side. No boats inspected by UDWR required professional decontamination.
- Trout Unlimited held a fishing tournament on the Green River below the dam. UDWR supplied boot wash stations and a decontamination unit.
- Plankton samples for presence/absence of *Dreissena* veligers were collected by the Bureau of Reclamation and sent to their microscopy lab in Denver, CO; all were found to be negative.
 - One sample collected in September at Buckboard Wash Marina (WY) showed eDNA **POSITIVE** for Quagga mussel; however, the DNA could not be sequenced and was not supported by microscopy. Thus, this single observation is considered not reportable, and is not an "inconclusive"

discovery. Additional testing by Pisces Molecular and BOR of other samples from UT and WY parts of the reservoir found no further evidence of Dreissena mussels, including several samples across time from the same Buckboard Wash Marina (WY).

- During the 2013 sample season this area will again be closely assessed.
- Regional Conservation Officers and State Park Rangers assisted with the interdiction, inspection and education of boaters during their routine boater/angler checks. Written warnings citations were given to boaters that were non-compliant with the self-certification process. No “Notice to Appear” in court citations was issued.

Flaming Gorge Reservoir—Wyoming side (WY Game & Fish Summary)

- 3,201 Watercraft inspections were conducted (Thursdays-Sundays and holidays).
- 17 high risk inspections were performed.
- 9 boat decontaminations were conducted, of which 2 boats were suspected to harbor AIS. One of these boats had been in Lake Havasu and had confirmed dead Quagga mussels attached, the other had unidentified seed pods attached.
- WY Flaming Gorge Top 5 “last waters” boated (N = 3,201)
 - Flaming Gorge Reservoir (N= 2,649 or 83%)
 - Lake Powell (N= <1% or 27)
 - Fontenelle Reservoir (N= <1% or 21)
 - Strawberry Reservoir (N= <1% or 20)
 - Willard Bay Reservoir (N= <1% or 20)

Note: Other last waters boated included Lake Havasu, AZ; Lake Mead, NV; Blue Mesa Reservoir, CO; and Pueblo Reservoir, CO—all <1% of Flaming Gorge’s overall use in WY, and all affected by Dreissena mussels.

Green River--below dam (random checks)

- No boats were interdicted and inspected from Memorial Day thru Labor Day.
 - 23 AIS contacts (river fishers) were educated.
- No boats were decontaminated.

Matt Warner Reservoir (random checks)

- Four boats were interdicted and inspected from Memorial Day thru Labor Day.
 - 17 AIS contacts were educated.
- No boats were decontaminated.

Pelican Lake

- Pelican Lake budget was \$23,291 and AIS personnel performed for 6.4 months or 0.53 FTE.
 - UDWR implemented the Plan as follows:
 - One UDWR funded Technician 1 @ \$14,665; 4.0 months—May thru August.

- One BLM funded Technician 1 @ \$8,626; 2.4 months—mid May thru July.

Note: A UDWR technician II (cost reported above) roved between Red Fleet, Steinaker, Pelican and Starvation, supervising the UDWR Technicians and coordinating with Utah Division of State Parks and Recreation.

- One \$13,400 trailer-mounted decontamination unit purchased in earlier fiscal years with UDWR General Funds is stationed at the lake.
- 425 boats were interdicted, inspected as needed, and educated about AIS.
 - 674 AIS contacts were educated.
 - 36 boater surveys were collected.
- 8 high risk inspections were performed, since the boats were used within the previous 30 days on a *Dreissena* mussel affected water body; and
- Two boats were professionally decontaminated due to their operator's stated use within the prior 30 days on a quagga, zebra or false dark mussel affected water body as follows: both from Sand Hollow Reservoir.
 - No boats were encrusted with quagga or zebra mussels.
- Boater History of Last Water Visited (N = 36 boater interviews)
 - Top 8 Last Waters Visited
 - Pelican (n=8 or 22%)
 - Flaming Gorge (n=4)
 - Sand Hollow (n=4)
 - Starvation (n=3)
 - Lake Powell (n=2)
 - Big Sandwash (n=2)
- No media releases were directly related to Pelican Lake in 2012.
- Plankton samples for presence/absence of *Dreissena* veligers were collected on July 5th and sent to the Bureau of Reclamation's microscopy lab in Denver, CO; all were found to be negative.
- Regional Conservation Officers and State Park Rangers assisted with the interdiction, inspection and education of boaters during their routine boater/angler checks. Written warnings citations were given to boaters that were non-compliant with the self-certification process. No "Notice to Appear" in court citations was issued.

Red Fleet Reservoir State Park & Steinaker Reservoir State Park Complex

Red Fleet Reservoir State Park:

- Red Fleet budget was \$19,648 and AIS personnel performed for 6.93 months or 0.58 FTE.
 - Contracted SP&R to implement the Plan as follows:
 - 0.5 UDWR funded Technician I @ \$3,405; 2.0 months—mid May thru mid July.
 - 1.0 CUWCD funded Technician I @ \$10,000; 3.11 months—Memorial Day thru Labor Day.

- 1.0 Uintah WCD funded Technician I @ \$6,243; 1.82 months—mid July thru Labor Day.
 - **Note:** Another UDWR technician II (cost reported above) roved between Red Fleet, Steinaker, Pelican and Starvation, supervising the UDWR Technicians and coordinating with Utah Division of State Parks and Recreation.
- One \$65,913 semi-permanent decontamination unit with culinary water supply and water capture/septic system that was purchased by UDWR with NRCS funds in an earlier fiscal year is stationed at the state park.

Note: 33.4 hours of use were put on this decontamination unit from Memorial Day to October 15th 2012. Total hours of use as of 11-09-12 are 196.2 hours.
- Another \$13,400 trailer-mounted decontamination unit purchased by UDWR with General Fund in an earlier fiscal year is stationed at the state park as back-up for the semi-permanent unit during periods of maintenance.
- 1,272 boats were interdicted, inspected as needed, and educated about AIS.
 - 2,140 AIS contacts were educated.
 - 304 boater surveys were collected.
- No high risk inspections were performed, since no boats reported being used within the previous 30 days on a Dreissena mussel affected water body. No arriving boats needed to be decontaminated. However, 159 boats were professionally decontaminated upon departure, since Red Fleet Reservoir is managed under authority of a control plan due to an earlier detection of quagga mussel larvae in 2008. No evidence of Dreissena mussels has been observed since, and Red Fleet Reservoir was down listed from “detected” to “inconclusive” at the end of 2011. It will remain as “inconclusive” through 2013, unless another detection of Dreissena mussels is made. If no further detections are made, Red Fleet will be further down listed to “not detected” at the end of 2013.

Note: All boats were decontaminated upon departure from Red Fleet, unless their next launch was to be at Red Fleet.

 - No boats were encrusted with quagga or zebra mussels.
- Other equipment decontaminated at Red Fleet included Utah State parks equipment, all water sports equipment and various other equipment used in Red Fleet.
- Boater History of Last Water Visited (N = 304 boater interviews)

Top 6 Last Waters Visited

 - Red Fleet (n=236 or 78%)
 - Steinaker (n=31)
 - Flaming Gorge (n=13)
 - Starvation (n=6)
 - Lake Powell (n=4)
 - Pelican (n=3)
- No media releases were directly related to Red Fleet in 2012.
- Red Fleet was sampled for Dreissena veligers once a month from May thru September. All samples were sent to the Bureau of Reclamation’s microscopy lab in Denver, CO; all were found to be negative. Additionally, qPCR assessment of

all samples for Dreissena eDNA at Pisces Molecular's lab in Boulder, CO showed negative, too.

- A State Parks boat that was moored in Red Fleet all summer; it and the docks were pulled out in the fall and inspected; no evidence for Dreissena mussels was found.
- Regional Conservation Officers and State Park Rangers assisted with the interdiction, inspection and education of boaters during their routine boater/angler checks. Written warnings citations were given to boaters that were non-compliant with the self-certification process. No "Notice to Appear" in court citations was issued.

Steinaker Reservoir State Park:

- Steinaker budget was \$19,648 and AIS personnel performed for 6.93 months or 0.58 FTE.
 - Contracted SP&R to implement the Plan.
 - Contracted SP&R to implement the Plan as follows:
 - 0.5 UDWR funded Technician I @ \$3,405; 2.0 months—mid May thru mid July.
 - 1.0 CUWCD funded Technician I @ \$10,000; 3.11 months—Memorial Day thru Labor Day.
 - 1.0 Uintah WCD funded Technician I @ \$6,243; 1.82 months—mid July thru Labor Day.
- Note:** Another UDWR technician II (cost reported above) roved between Red Fleet, Steinaker, Pelican and Starvation, supervising the UDWR Technicians and coordinating with Utah Division of State Parks and Recreation.
- One \$13,400 trailer-mounted decontamination unit purchased by UDWR with General Funds in an earlier fiscal year is stationed at the state park.
 - 3,065 boats were interdicted, inspected as needed, and educated about AIS on the Utah side of Flaming Gorge Reservoir.
 - 5,580 AIS contacts were educated.
 - 271 boater surveys were collected.
 - No high risk inspections were performed, since no boats reported being used within the previous 30 days on a Dreissena mussel affected water body.
 - No boats were professionally decontaminated due to their operator's stated use within the prior 30 days on a quagga, zebra or false dark mussel affected water body.
 - No boats were encrusted with quagga or zebra mussels.
 - No other equipment was decontaminated at Steinaker in 2012.
 - Boater History of Last Water Visited (N = 271 boater interviews)
 - Top 6 Last Waters Visited
 - Steinaker (n= 191 or 70%)
 - Red Fleet (n= 22)
 - Flaming Gorge (n= 13)
 - Storage/1st time (n= 12)
 - Pelican (n= 6)

- Starvation (n= 4)
- No media releases were directly related to Steinaker in 2012.
- Plankton samples for presence/absence of *Dreissena veligers* were collected on July 12th and sent to the Bureau of Reclamation's microscopy lab in Denver, CO; all were found to be negative.
- A State Parks boat that was moored in Steinaker all summer; it and the docks were pulled out in the fall and inspected; no evidence for *Dreissena* mussels was found.
- Regional Conservation Officers and State Park Rangers assisted with the interdiction, inspection and education of boaters during their routine boater/angler checks. Written warnings citations were given to boaters that were non-compliant with the self-certification process. No "Notice to Appear" in court citations was issued.

Starvation Reservoir State Park

- Starvation budget was \$20,000 and AIS personnel performed for 6.22 months or 0.26 FTE.
 - Contracted SP&R to implement the Plan.
 - Two CUWCD funded Technicians @ \$20,000; 7 months (3.11 months each—Memorial Day thru Labor Day).
- One \$13,400 trailer-mounted decontamination unit purchased by UDWR with General Funds in an earlier fiscal year is stationed at the state park.
- 3,065 boats were interdicted, inspected as needed, and educated about AIS.
 - 4,786 AIS contacts were educated.
 - 142 boater surveys were collected.
- 27 high risk inspections were performed, since the boats were used within the previous 30 days on a *Dreissena* mussel affected water body.
- One boat was professionally decontaminated due to their operator's stated use within the prior 30 days on a quagga, zebra or false dark mussel affected water body as follows: the data was inadvertently lost, so it is unknown.
 - No boats were encrusted with quagga or zebra mussels.
- No other equipment was decontaminated at Starvation.
- Boater History of Last Water Visited (N = 142 boater interviews)
 - Top 6 Last Waters Visited
 - Strawberry (n=35 or 23%)
 - Starvation (n=32)
 - Lake Powell (n=11)
 - Unknown (n=9)
 - Red Fleet (n=8)
 - Utah Lake (n=6)
- No media releases were directly related to Starvation.
- Plankton samples for presence/absence of *Dreissena veligers* were collected on August 12th and sent to the Bureau of Reclamation's microscopy lab in Denver, CO; all were found to be negative.

- Regional Conservation Officers and State Park Rangers assisted with the interdiction, inspection and education of boaters during their routine boater/angler checks. Written warnings citations were given to boaters that were non-compliant with the self-certification process. No “Notice to Appear” in court citations was issued.

Work Completed on Other Non-Dreissena AIS

- **Non-Dreissena AIS Discovered Around the Flaming Gorge National Recreation Area**
 - Curley-leaf Pondweed (*Potamogeton crispus*), floating, was first found at Flaming Gorge Reservoir in 2010 at Nad 83 UTM 12 T 0621290, 4535742 near Antelope Flats boat ramp. Further investigation yielded only pieces of the plant but no source area.
 - In 2011 Curley-leaf Pondweed was found in the same general areas as in 2010, again floating. As water levels in the lake began to rise pondweed sightings diminished. No source area was discovered in 2011.
 - Curley-leaf Pondweed was identified on the Green River below Flaming Gorge Dam at Nad 83 UTM 12 T 0641079, 4530033 on September 18th 2011. A single floating piece was found along with other floating vegetation.
 - In 2012 Curley-leaf Pondweed was found in medium abundance on the Green River from the Flaming Gorge Dam to Browns Parks between Nad 83 UTM’s 12 T 0632846, 4529797 and 12 T 0655842, 4528458 on August 8, 2012. No source area could be discovered in 2012.
 - New Zealand Mud Snails were found on Green River below Flaming Gorge Dam across from Little Hole boat ramp at Nad 83 UTM 12 T 0641237, 4529837 on August 8, 2012. They were previously known from this area.
 - Near Flaming Gorge Reservoir is Browne Lake. The west fork of Carter Creek flows from Browne Lake into the main stem of Carter Creek which then flows into Flaming Gorge Reservoir. On August 18th 2011 the west fork of Carter creek was sampled for Didymo (*Didymosphenia geminate*) by the DWR and samples were sent to both the Utah Fisheries Experiment Station and to Pisces Molecular Lab for microscopy and PCR identification, respectively. Results from these samples came back **POSITIVE** from both labs for Didymo in this drainage. The samples were collected at Nad 83 UTM’s 12T 0600346, 4524362 and further downstream at 12T 0600500, 4523809.
 - Also present in both Browne Lake and Sheep Creek Lake was a form of pondweed identified as Claspingleaf Pondweed (*Potamogeton richardsonii*) which is native to Maine. Claspingleaf Pondweed is much more prevalent in Sheep Creek Lake, but does not appear to be causing significant problems in the lake as of yet.

- **Non-Dreissena AIS Discovered in Other Areas of the Region**

- NZMS presence/absence surveys completed on Jones Creek. A 4 mile stretch from Jones Hole National Fish Hatchery down to the confluence with the Green River. Sampling was conducted on June 20-21st 2012 between Nad 83 UTM's 12 T 0664603, 4493597 and 12 T 0664628, 4492099. A total of 15 different sections were sampled by AIS technicians and the AIS Biologist. No NZMS were found on this stretch of creek.
- Didymo sampling on Rock Creek below Upper Stillwater Dam was collected on September 15th 2011 at Nad 83 UTM's 12 T 0535746, 4482662 and 12 T 0535929, 4482059. Results for these samples were **POSITIVE**.
- Eurasian Watermilfoil (*Myriophyllum spicatum*) samples at Cottonwood Reservoir were collected June 5th 2012 at Nad 83 UTM 12 N 0602290, 4467708. Results for these samples were **POSITIVE**.
- Eurasian Watermilfoil (*Myriophyllum spicatum*) samples at Bullock Reservoir were collected June 5th 2012 at Nad 83 UTM 12 N 0600291, 4467556. Results for these samples were **POSITIVE**.
- AIS presence/absence surveys completed on Brough Reservoir. Sampling was conducted June 5th 2012 at Nad 83 UTM 12 N 0610473, 4457165. No AIS were found.
- AIS presence/absence surveys completed on Sheep Creek Lake and inlet stream. A ¼ mile stretch from outlet to above fish trap and perimeter of Sheep Creek Lake. Sampling was conducted June 14th and 17th 2012 at Nad 83 UTM 12 T 0596907, 4526916. No AIS were found.
- AIS presence/absence surveys completed on Browne Lake July 9th 2012 at Nad 83 UTM 12 T 0600138, 4524094. Claspingleaf Pondweed (*Potamogeton richardsonii*) was identified, and samples were collected for a suspect Didymo population. Results for the 2012 Didymo samples were lost in shipment to the lab and will be repeated in summer 2013.
- AIS presence/absence surveys completed on East Park Reservoir and streams. Sampling was conducted July 15th and 16th 2012 at Nad 83 UTM's 12 T 0621809, 4514873 and 12 T 0622442, 4515177. No AIS were found.
- AIS presence/absence surveys completed on Cart Creek and Cart Creek meadows along US 191. Sampling was conducted July 16th 2012 at Nad 83 UTM 12 T 0629036, 4516483. No AIS were found.
- AIS presence/absence surveys completed on Currant Creek Reservoir. Sampling was conducted July 19th 2012 at Nad 83 UTM 12 T 0495080, 4464883. Samples were taken from a watermilfoil population. PCR results showed this population to be Northern Watermilfoil (*Myriophyllum sibiricum*).
- AIS presence/absence surveys completed on Deep Creek from the stretch beside Deep Creek Campground downstream to confluence with Carter Creek. Sampling was conducted July 30th 2012 at Nad 83 UTM 12 T 0607019, 4523463. Samples were taken for a suspect Didymo population. Results for the 2012 Didymo samples were lost in shipment to the lab and will be repeated in summer 2013.

- AIS presence/absence surveys were completed on Jones Hole National Fish Hatchery in the spring head, raceways, side channel, hatchery building, 4 miles of Jones Creek between hatchery and confluence with Green River including Ely Creek. Sampling was conducted June 28th 2012 at Nad 83 UTM 12 N 0665511, 4494943 by AIS Biologist and AIS technicians. No AIS were found.
- AIS presence/absence surveys completed on Ouray National Fish Hatchery-Grand Valley Unit at Grand Junction CO. Indoor ponds/troughs, filters, rearing tanks, drum filter, effluent water and the associated outdoor ponds were inspected. Sampling was conducted August 2nd 2012 at Nad 83 UTM 12 S 0693628, 4336583 by the AIS Biologist and the AIS Coordinator. No AIS were found.
- AIS presence/absence surveys completed on Whiterocks State Fish Hatchery. Inlet filter, auxiliary holding tank, rearing tanks, incubation tanks and quiescent overflows were assessed. Sampling was conducted August 7th 2012 at Nad 83 UTM 12 N 0588483, 4482000 by AIS Biologist and AIS technician. No AIS were found.

END